

AMENDMENTS TO THE CLAIMS

1. (currently amended) A printed circuit inductor comprising:

~~a first wiring layer;~~

5 ~~a second wiring layer formed under and parallel to the first wiring layer;~~

a first conductive trace formed on ~~the~~ a first wiring layer of a printed circuit board;

10 a second conductive trace formed on ~~the~~ a second wiring layer of a printed circuit board, wherein the second layer is disposed below and parallel to the first layer, the layers being separated by an insulating material;

a third conductive trace formed on the first wiring layer and parallel to the first conductive trace;

a fourth conductive trace formed on the second wiring layer and parallel to the second conductive trace;

15 a first via plug directly connected to a first end of the first conductive trace and to a first end of the second conductive trace;

a second via plug directly connected to a second end of the second conductive trace and to a first end of the third conductive trace; and

20 a third via plug directly connected to a second end of the third conductive trace and a to first end of the fourth conductive trace.

2. (original) The inductor of claim 1 wherein the first via plug is perpendicular to the first conductive trace, the second via plug is perpendicular to the second conductive trace, and the third via plug is perpendicular to the third conductive trace.

3. (currently amended) A printed circuit inductor comprising:

30 ~~a plurality of conductive layers, wherein each conductive layer comprises a plurality of conductive traces and the conductive traces are formed alternately;~~

a plurality of conductive traces formed on a plurality of wiring layers of a printed circuit board, wherein the conductive element of the inductor is

formed from interconnected conductive traces disposed on separate wiring layers, each conductive trace having at least an end disposed coincident with an end of a conductive trace disposed on a separate layer allowing interconnection by a via;

- 5 a plurality of insulating layers for isolating the conductive layers from each other; and
a plurality of via plugs for each directly connecting the conductive traces on different conductive layers.

10 4. (original) The inductor of claim 3 wherein the plurality of conductive layers is formed having two layers.

5. (original) The inductor of claim 3 wherein the plurality of via plugs is perpendicular to the plurality of conductive layers.

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6. (original) The inductor of claim 3 wherein the magnetic field generated by the inductor is in parallel with the conductive layers.

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